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June 4, 2003

Commissioner for Patents  
P.O. Box 1450, Alexandria  
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TECH CENTER 1600/2900

Re: U.S. Patent Application No.: 09/991,099  
For: *MSH4 Ablated Mice and Uses Therefor*  
Inventors: Pollard, Jeffrey W. *et al*  
Filed: November 21, 2001  
Our Ref. No.: AHN-010

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

1. Information Disclosure Statement;
2. PTO Form 1449;
3. Copies of references cited in PTO Form 1449 (11); and
4. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450:

June 4, 2003  
Date  
Lisa M. DiRocco  
Lisa M. DiRocco, Esq., Reg. No. 51,619

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

Lisa M. DiRocco, Esq.  
Registration No. 51,619  
Attorney for Applicants



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#11  
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6/12/03

In re the application of: Pollard, Jeffrey W. *et al.*

Serial No.: 09/991,099

Filed: November 21, 2001

For: *MSH4 Ablated Mice and Uses Therefor*

Attorney Docket No.: AHN-010

Group Art Unit: 1632

Examiner: Paras Jr., Peter

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June 4, 2003  
Date of Signature and of Mail Deposit

By:

Lisa M. DiRocco  
Lisa M. DiRocco, Esq.  
Registration No. 51,619  
Attorney for Applicants

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants and their Attorney are aware of the following publications and information, listed on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. A copy of each cited publication is enclosed.

Adjustment date: 07/25/2003 EERUBAY1  
06/12/2003 DJAC085 00000001 120080 09991099  
01 FC:1806 180.00 CR

06/12/2003 DJAC085 00000001 120080 09991099

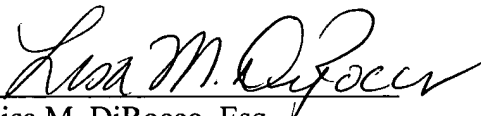
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This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

Under 37 CFR § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee for consideration of \$180.00 as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

  
Lisa M. DiRocco, Esq.  
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Attorney for Applicants

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Date: June 4, 2003

AEM/MCL/ipc  
Enclosures

Office No. AHN-010

**THE "RECEIVED" STAMP OF THE PATENT AND TRADEMARK OFFICE  
IMPRINTED HEREON ACKNOWLEDGES THE FILING OF:**

**Description of Paper\* :** Transmittal Letter (1 page in duplicate), Information Disclosure Statement (2 pages), PTO Form 1449 (1 page) with copies of all references cited therein (11) are enclosed along with this postcard.

**Title:** *MSH4 Ablated Mice and Uses Therefor*

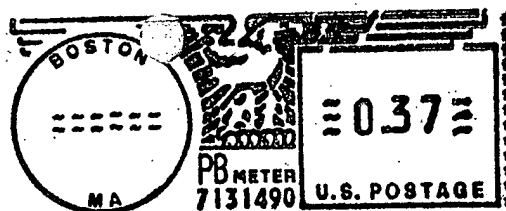
**Name of Applicants:** Pollard, Jeffrey W. *et al*

**Serial No.:** 09/991,099

**Attys:** AEM/MCL/LMD

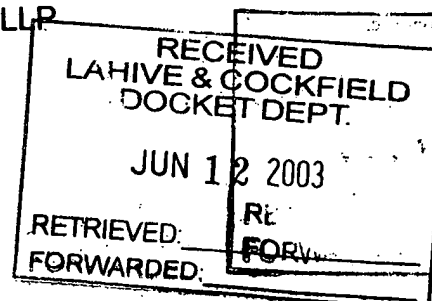
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LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT <b>Pollard, Jeffrey W. <i>et al.</i></b>	
		FILING DATE <b>N vember 21, 2001</b>	GROUP <b>1632</b>

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	A1 WO 99/01550 A1	01/99	WO			
	A2 WO 99/10369 A1	03/99	WO			

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

A3	Bocker T <i>et al.</i> hMSH5: a human MutS homologue that forms a novel heterodimer with hMSH4 and is expressed during spermatogenesis. Cancer Res. 1999 Feb 15;59(4):816-22
A4	Cohen PE <i>et al.</i> Regulation of meiotic recombination and prophase I progression in mammals. Bioessays. 2001 Nov;23(11):996-1009
A5	Gen Bank Accession AF104243, Homo sapiens meiosis-specific MutS homolog (MSH4) mRNA, complete cds. (March 4, 1999)
A6	Hollingsworth NM <i>et al.</i> MSH5, a novel MutS homolog, facilitates meiotic reciprocal recombination between homologs in Saccharomyces cerevisiae but not mismatch repair. Genes Dev. 1995 Jul 15;9(14):1728-39
A7	Khazanehdari KA Borts RH. EXO1 and MSH4 differentially affect crossing-over and segregation. Chromosoma. 2000;109(1-2):94-102.
A8	Kneitz B <i>et al.</i> MutS homolog 4 localization to meiotic chromosomes is required for chromosome pairing during meiosis in male and female mice. Genes Dev. 2000 May 1;14(9):1085-97
A9	Paquis-Flucklinger V <i>et al.</i> Cloning and expression analysis of a meiosis-specific MutS homolog: the human MSH4 gene. Genomics. 1997 Sep 1;44(2):188-94.
A10	Winand NJ <i>et al.</i> Cloning and characterization of the human and Caenorhabditis elegans homologs of the Saccharomyces cerevisiae MSH5 gene. Genomics. 1998 Oct 1;53(1):69-80
A11	Zalevsky J <i>et al.</i> Crossing over during Caenorhabditis elegans meiosis requires a conserved MutS-based pathway that is partially dispensable in budding yeast. Genetics. 1999 Nov;153(3):1271-83
Examiner	
Date Considered	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	